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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Gavriel Meron

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EXAMINER

DANIELS, ANTHONY J

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

03/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/584,997	Applicant(s) MERON ET AL.	
	Examiner ANTHONY J. DANIELS	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

1. The drawings are objected to because the blocks in Figure 1A are not labeled. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 29-31 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 only includes a preamble and linking phrase. As claims 30 and 31 are dependent on claim 29, these claims will not be given an art rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 24-28,32,34-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Davidson et al. (US 2004/0027500).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

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inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

As to claim **24**, Davidson et al. teaches a method for displaying an in vivo image stream (Figure 1), said method comprising: displaying a plurality of frames from the in vivo image stream substantially simultaneously (Figure 2); assigning a score to each of the plurality of frames based on a predetermined criteria ([0050], Lines 19-21); and positioning frames in a spatial order based on the score ([0050], Lines 22-24).

As to claim **25**, Davidson et al. teaches the method according to claim 24 comprising displaying the in vivo image stream as a multi-frame image stream (Figure 2).

As to claim **26**, Davidson et al. teaches the method according to claim 24 comprising adjusting a rate at which the multi-frame image stream is displayed based on the content of the frames ([0030], Lines 8 and 9).

As to claim **27**, Davidson et al. teaches the method according to claim 24 wherein the predetermined criteria includes a degree of variation of the displayed images as compared to a reference image ([0050], Lines 19-21, *{The reference is frame is one of the frames whose spectral characteristics is analyzed.}*).

As to claim **28**, Davidson et al. teaches the method according to claim 24 wherein the predetermined criteria includes a degree of color variation between the displayed images ([0050], Lines 19-22, “...intensity...”).

As to claim **32**, Davidson et al. teaches the method according to claim 24 wherein the in vivo image stream includes frames captured from more than one image sensor ([0037], Lines 13-16).

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As to claim **34**, Davidson et al. teaches a system for displaying an in vivo image stream (Figure 1), the system comprising: an in vivo imaging device to transmit an in vivo image stream (Figure 1, capsule “40”); a processor (Figure 1, data processor “14”) to generate a multi-frame image stream from the in vivo image stream, to assign a score to frames to be displayed substantially simultaneously based on a predetermined criteria ([0050], Lines 19-21) and to determine a spatial position of frames in the multi-frame image stream based on the score ([0050], Lines 22-24); and a display to display said multi-frame image stream (Figure 2).

As to claim **35**, Davidson et al. teaches the system of claim 34 wherein the in vivo imaging device is an autonomous capsule ([0026], Line 4).

As to claim **36**, Davidson et al. teaches the system of claim 34 comprising a pH sensor ([0061], Line 8).

As to claim **37**, Davidson et al. teaches the system of claim 34 wherein the predetermined criteria includes a sensor reading ([0050], Lines 19-21, *{Intensity, saturation or hue is based on the image which is read from an image sensor.}*)).

As to claim **38**, Davidson et al. teaches the system of claim 34 wherein the processor is to adjust the stream rate of the multi-frame image stream ([0030], Lines 8 and 9).

As to claim **39**, Davidson et al. teaches a method for displaying an in vivo image stream (Figure 1), the method comprising: selecting a plurality of frames from an in vivo image stream; positioning the plurality of frames in an order based on a criteria of interest; and displaying the plurality of frames substantially simultaneously (Figure 2; [0050]).

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As to claim **40**, Davidson et al. teaches the method according to claim 39 comprising comparing a frame from the plurality of frames to a reference image ([0050], Lines 19-21, *{The reference is frame is one of the frames whose spectral characteristics is analyzed.}*).

As to claim **41**, Davidson et al. teaches the method according to claim 39 comprising assigning scores to the plurality of frames based on the criteria of interest ([0050], Lines 19-21, "...intensity...").

As to claim **42**, Davidson et al. teaches the method according to claim 39 comprising displaying the plurality of frames in different sizes substantially simultaneously ([0038]).

As to claim **43**, Davidson et al. teaches the method according to claim 39 wherein the criteria of interest is color variation between the plurality of frames ([0050], Lines 19-22).

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson et al. (US 2004/0027500) in view of Iddan et al. (US # 5,604,531).

As to claim **33**, Davidson et al. teaches the method according to claim 24. The claim differs from Davidson et al. in that it further requires the step of displaying sensor data from a sensor other than an image sensor substantially simultaneously with the frames from the in vivo image stream.

In the same field of endeavor, Iddan et al. teaches an in vivo imaging stream wherein a monitor that displays an image stream simultaneously displays the position of a capsule in a tract in the body. The capsule position is calculated from antenna readings (Figure 6). In light of the teaching of Iddan et al., it would have been obvious to one of ordinary skill in the art to simultaneously display the position of the capsule along with the stream, because an artisan of ordinary skill in the art would recognize that this would allow a doctor to locate a problem in the body and thus provide a better diagnosis.

Conclusion

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J. DANIELS whose telephone number is (571)272-7362. The examiner can normally be reached on 8:00 A.M. - 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AD

3/23/2009

/Sinh N Tran/

Supervisory Patent Examiner, Art Unit 2622